RFID Access Control Terminal for IP-based Networks
Controller Intelligence & RFID Reader with Ethernet Interface in one device

ID MAX50.10-xE (13.56 MHz)

FEATURES
- Off line management of up to 9,000 users (Stand-alone operation)
- Fast Ethernet interface (10 Mbit/100 Mbit)
- Optional Power over Ethernet (PoE) or external power supply
- AES-encrypted Ethernet – Data transfer
- Operates with ISO 14443 –A/-B and ISO 15693 transponders
- Identification via serial number (UID, CSN) or freely configurable data area
- Real time clock & time zones
- Configurable event memory
- External relay optional
RFID Access Control Terminal ID MAX50.10-xE

System description

ID MAX50.10-xE is a cost effective alternative to traditional access control solutions. The fast Ethernet interface (10BASE-T / 100BASE-TX) allows an easy integration into IP-based network infrastructures with CAT-5 cables. The AES-encrypted data ensures a high system security and protects the access control infrastructure effectively against attacks by intercepting or tampering.

ID MAX50.10-xE is a complete and independently-working access control terminal for up to 9000 users. It combines the functions of an intelligent controller with Ethernet interface and a RFID smart card reader in one compact device. The dimensions are the same as those of a conventional RFID smart card reader. The ID MAX50.10-xE checks access permissions offline, without a live connection to a host system. The integrated real time clock allows the management of temporal restrictions with up to 16 time slots.

Events can be stored locally at the ID MAX50.10-xE in a configurable event memory. Alternatively, events can be immediately reported to a host system via Access notification mode. The event memory can be adapted to different data protection laws, but it can be also completely disabled.

Power is supplied via Power over Ethernet (PoE) according to EEE802.3af or via an external DC power supply.

ID MAX50.10-xE supports passive transponder according to ISO / IEC 14443 type A and type B, ISO / IEC 15693 and communicates with NFC devices (ISO / IEC 18092). As an identifier, ID MAX50.10-xE can examine either the serial number (UID / CSN) or user-selectable memory areas of the transponder.

Because of the open software architecture and compatibility with other OBID® RFID readers, the device can be easily incorporated into various applications. That for, software development kits (SDK) for current operating systems and programming environments are available.

Typical applications for the ID MAX50.10-xE are in industrial and commercial installations. Each unit can be a part of a complex access control system with widely distributed access points. Furthermore it can also be used for single doors in small and medium-sized installations.

ID MAX50.10-xE is available in two versions:

1. **ID MAX50.10-RE**
   - This version has an internal relay and is suitable for the control of doors with medium security requirements.

2. **ID MAX50.10-E**
   - In this version the external I/O Extension Board ID CPR.I/O-A with 2 digital inputs and one relay can be connected. The external relay ensures maximum security, as it can be placed inside the area to be secured.

Delivery:

- ID MAX50.10-E resp. ID MAX50.10-RE
- Surface mount adapter for surface mounting or mounting on metallic surfaces
- Mounting instruction

Accessories:

ID CPR.I/O-A: I/O-Extension Board with one relay and two digital inputs (only for ID MAX50.10-E)
RFID Access Control Terminal ID MAX50.10-xE

TECHNICAL DATA

Dimensions
  Reader 84 mm x 84 mm x 22 mm
  Surface spacer 78 mm x 78 mm x 18 mm
  Housing Corpus: Plastic ASA / Front panel: acrylic glass
  Color Corpus: white / Front panel: black
  Weight approx. 150 g
  Protection class IP 54
  Operating frequency 13.56 MHz
  RF Transmitting power 250 mW ± 2 dB
  Supply voltage Power over Ethernet (PoE), IEEE802.3af;
  alternative: ext. power supply 24V up to 48 V DC ± 10%
  Current consumption maximum 2.6 W (IEEE802.3af Powered Devices Class: 1)
  Supported transponders ISO 14443-A1, ISO 14443-B2, ISO 156934, NFC4
  Antenna integrated, approx. 70 mm x 70 mm
  Interface Ethernet 10BASE-T/100BASE-TX, Automatic MDI/MDI-X Crossover correction,
  TCP/IP protocol, IPv4
  Cable specification maximum 100 m CAT-5 cable
  LEDs 3 x (blue, green and red) with configurable function
  Buzzer integrated
  Real time clock 24 h power reserve; Accuracy: ± 2 sec/day
  Inputs / Outputs ID MAX50.10-RE:
    1 x Relay (normally open contact); contact rating: 24 V AC/DC 1.5 A
    ID MAX50.10-E (with I/O-Extension Board ID CPR.I/O-A):
    1 x Relay (change-over contact); contact rating: 24 V AC/DC 1.5 A
    2 x digital Inputs
  Memory FRAM for user data, 1014 write cycles
  EEPROM for configuration data, 1 Million write cycles
  Reading / Writing distance typical 3 up to 10 cm5
  Temperature range
    Operation ±20 °C up to +55 °C
    Storage ±40 °C up to +85 °C
  Relative air humidity 95 % (non condensing)

1) z.B. mfal® classic (mini,1k,4k), mfal® UltraLight, mfal® DESFire, Smart MX, my-d1™ proximity, my-d™ move, SLE44R35S, etc.
2) z.B. SLE66CL, ST19XR34, RF360, etc.
3) z.B. I-CODE Sli, my-d™ vicinity, STM LRI512, Tag-it HiFi, etc.
4) NFC Type 1, 2 and 4 in Read/Write and NFC Card Emulation Mode
5) Reading distances depend on the used transponders; here made statements relate on an inlet size of 76 x 45 mm (3.00 x 1.78 in)

STANDARD CONFORMITY

Radio license
  Europe EN 300 330
  USA FCC 47 CFR Part 15
  Canada IC RSS-GEN, RSS-210, RSS-212
  EMC EN 300 489
  Safety
    Low voltage EN 60950
    Human Exposure EN 50364
  Environment RoHS-2002/95/EC
                    WEEE-2002/96/EC

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